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Intellectual information decision support system in the field of economic justice

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Abstract

© 2018 CEUR-WS. All rights reserved. Annotation. The architecture of the system for the intellectual analysis of texts in jurisprudence, which is capable of marking important places to which attention should be paid during procedural actions using text analytics tools, is described. To extract meaningful entities and facts from a corpus of legal texts we created a model. An algorithm for automatic extraction of entities based on a recurrent neural network was trained on the corpus of legal texts. As a result, it was revealed that the recurrent neural network predicts entities that were not manually labeled or incorrectly labeled and markup checking is required. An important function of the system is to search for and provide similar solutions for similar lawsuits. For the correct determination of the category of lawsuit, the task of classification of entities is solved. More than 80 different categories of lawsuits identified, occurring with varying frequency. The classification process with an increase in the number of processed documents can be very time consuming, so this functionality is implemented by a separate microservice with integration with other modules of the system in asynchronous mode. A separate module of the system is a website - template of claim statements, which allows to filling correctly typical claims. The development of the system is carried out together with practicing lawyers, as experts from the subject area. Judges of the Arbitration Court of the Republic of Tatarstan, teachers and students of the law faculty of Kazan Federal University are also involved.

Keywords

Data analytics, Data intensive domains, Data management, Decision support systems, Digital libraries, Recommender system

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